

# LIST OF TECHNICAL TABLES

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**Technical Table 1. The NSF data collection series: 1966-1999**

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Year	Number of institutions surveyed	Number of reporting units surveyed	Number of departments surveyed			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full-time	Part-time
A. Graduate Traineeship Program								
1966 .....	204	204	2,866	441	2,425	169,303	124,255	45,048
1967 .....	209	209	3,014	434	2,580	179,622	133,972	45,650
1968 .....	219	219	3,190	454	2,736	184,759	140,714	44,045
1969 .....	224	224	3,354	460	2,894	196,341	147,515	48,826
1970 .....	227	227	3,544	473	3,071	201,918	153,250	48,668
1971 <sup>1</sup> .....	224	249	3,397	407	2,990	214,680	164,764	49,916
B. Survey of Graduate Students and Postdoctorates in Science and Engineering <sup>2</sup>								
Doctorate institutions:								
1972 .....	260	328	4,593	780	3,813	210,895	161,329	49,566
1973 .....	258	335	6,527	852	5,675	214,378	161,555	52,823
1974 .....	279	369	7,474	1,390	6,084	260,001	190,589	69,412
1975 .....	335	432	7,936	1,759	6,177	296,384	207,930	88,454
1976 .....	345	443	8,034	1,816	6,218	300,794	211,767	89,027
1977 .....	346	448	8,259	1,946	6,313	309,338	214,199	95,139
1978 .....	324	432	8,230	1,843	6,387	302,370	209,946	92,424
1979 .....	362	477	8,504	2,017	6,487	318,683	218,215	100,468
1980 .....	361	476	8,607	2,063	6,544	328,330	224,393	103,937
1981 .....	359	472	8,530	2,058	6,472	334,983	228,198	106,785
1982 .....	356	470	8,385	2,042	6,343	341,216	231,193	110,023
1983 .....	355	469	8,260	2,005	6,255	348,167	237,166	111,001
1984 .....	337	455	8,234	1,945	6,289	349,519	237,844	111,675
1985 .....	337	450	8,346	1,984	6,362	358,773	241,421	117,352
1986 .....	337	452	8,417	1,992	6,425	369,370	250,041	119,329
1987 .....	341	458	8,533	1,997	6,536	375,011	254,671	120,340
1988 .....	360	478	8,821	2,123	6,698	381,769	260,490	121,279
1989 .....	361	479	8,943	2,136	6,807	389,322	267,672	121,650
1990 .....	360	478	9,088	2,183	6,905	403,335	276,472	126,863
1991 .....	360	478	9,284	2,205	7,079	418,833	289,084	129,749
1992 .....	360	478	9,520	2,253	7,267	438,109	303,305	134,804
1993 .....	360	478	9,708	2,261	7,447	446,383	309,429	136,954
1994 .....	359	477	9,917	2,317	7,600	447,058	311,064	135,994
1995 .....	358	476	10,092	2,368	7,724	441,360	307,446	133,914
1996 .....	359	477	10,106	2,418	7,688	435,959	306,225	129,734
1997 .....	358	480	10,077	2,487	7,590	429,159	304,029	125,130
1998 .....	358	479	10,155	2,495	7,660	426,529	303,095	123,434
1999 .....	357	478	10,265	2,459	7,806	432,657	309,466	123,191

See explanatory information, if any, and SOURCE at end of table.

**Technical Table 1. The NSF data collection series: 1966-1999**

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Year	Number of institutions surveyed	Number of reporting units surveyed	Number of departments surveyed			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full-time	Part-time
<b>Master's institutions:</b>								
1975 <sup>3</sup>	251	251	1,068	1,068	N/A	32,166	11,757	20,409
1976	251	251	1,077	1,077	N/A	32,961	11,679	21,282
1977	257	257	1,134	1,134	N/A	36,078	12,577	23,501
1978 <sup>4</sup>	276	276	1,279	1,279	N/A	37,542	13,084	24,458
1979	269	269	1,183	1,183	N/A	38,926	13,575	25,351
1980	267	267	1,192	1,192	N/A	38,781	14,055	24,726
1981	265	265	1,199	1,199	N/A	40,175	13,878	26,297
1982	255	255	1,200	1,200	N/A	41,118	13,603	27,515
1983	255	255	1,208	1,208	N/A	42,307	14,889	27,418
1984 <sup>5</sup>	75	75	557	557	N/A	45,151	16,078	29,073
1985 <sup>5</sup>	75	75	565	565	N/A	45,248	15,866	29,382
1986 <sup>5</sup>	75	75	568	568	N/A	46,150	16,127	30,023
1987 <sup>5</sup>	75	75	571	571	N/A	46,486	16,385	30,101
1988	246	246	1,195	1,195	N/A	42,823	14,695	28,128
1989	248	248	1,245	1,245	N/A	45,230	15,039	30,191
1990	250	250	1,271	1,271	N/A	48,836	16,351	32,485
1991	249	249	1,315	1,315	N/A	52,451	17,971	34,480
1992	248	248	1,353	1,353	N/A	55,515	19,304	36,211
1993	246	246	1,396	1,396	N/A	58,026	20,272	37,754
1994	246	246	1,449	1,449	N/A	57,458	21,085	36,373
1995	245	245	1,475	1,475	N/A	58,390	21,910	36,480
1996	244	244	1,474	1,474	N/A	58,236	22,403	35,833
1997	243	243	1,513	1,513	N/A	58,120	23,281	34,839
1998	243	243	1,531	1,531	N/A	59,195	24,352	34,843
1999	242	242	1,568	1,568	N/A	60,768	24,939	35,829

1 The 1972 survey also collected selected data for 1971.

2 The name of the survey was changed in 1981 to specify the inclusion of engineering.

3 The 1976 survey also collected 1975 data from master's-granting institutions.

4 Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

5 Master's-granting institutions were surveyed on a sample basis from 1984 through 1987.

**KEY:** N/A = Not applicable

**SOURCE:** National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 2. Number of science, engineering, and health departments  
in doctorate-granting institutions, by detailed field: 1992-1999**

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Field	1992	1993	1994	1995	1996	1997	1998	1999
Total, all surveyed fields .....	9,520	9,708	9,917	10,092	10,106	10,077	10,155	10,265
Total, science and engineering fields .....	6,879	6,972	7,111	7,231	7,225	7,240	7,302	7,372
Sciences, total .....	5,557	5,628	5,731	5,825	5,805	5,800	5,840	5,891
Physical sciences, total .....	569	573	573	581	575	577	581	581
Astronomy .....	33	34	34	35	35	35	36	36
Chemistry .....	273	273	271	271	271	272	271	274
Physics .....	248	250	252	254	250	253	255	248
Physical sciences, n.e.c. .....	15	16	16	21	19	17	19	23
Earth, atmos., & ocean sci., total .....	326	330	339	353	350	352	361	360
Atmospheric sciences .....	29	31	32	33	33	32	33	32
Geosciences .....	204	204	208	212	212	209	208	205
Oceanography .....	45	45	46	50	48	49	54	56
Earth, atmos., & ocean sci., n.e.c. .....	48	50	53	58	57	62	66	67
Mathematical sciences, total .....	379	386	393	398	398	396	393	393
Mathematics & applied mathematics .....	304	309	313	317	316	315	313	313
Statistics .....	75	77	80	81	82	81	80	80
Computer sciences .....	260	262	270	281	288	292	299	307
Agricultural sciences .....	315	312	318	324	318	328	333	327
Biological sciences, total .....	1,920	1,965	1,992	2,008	1,988	1,959	1,977	1,996
Anatomy .....	103	102	102	99	98	94	91	89
Biochemistry .....	190	190	191	193	192	192	192	194
Biology .....	241	240	239	239	241	248	252	252
Biometry/epidemiology .....	61	69	71	72	72	71	72	73
Biophysics .....	33	33	33	33	34	31	31	31
Botany .....	102	103	104	101	98	95	94	88
Cell biology .....	106	112	120	123	123	124	137	138
Ecology .....	28	27	31	31	30	29	30	35
Entomology/parasitology .....	48	49	49	48	48	48	49	47
Genetics .....	76	79	82	84	83	82	82	83
Microbio., immunology, & virology .....	249	260	261	265	264	254	258	264
Nutrition .....	114	117	122	126	125	123	124	125
Pathology .....	145	143	143	144	139	138	135	134
Pharmacology .....	167	168	169	169	164	159	158	162
Physiology .....	146	146	144	146	144	138	133	133
Zoology .....	47	50	50	49	45	41	40	40
Biosciences, n.e.c. .....	64	77	81	86	88	92	99	108
Psychology, total .....	522	527	543	559	564	571	574	590
Psychology, general .....	171	168	170	170	167	171	173	176
Clinical psychology .....	112	115	117	124	128	129	128	130
Psychology, n.e.c. .....	239	244	256	265	269	271	273	284
Social sciences, total .....	1,266	1,273	1,303	1,321	1,324	1,325	1,322	1,337
Agricultural economics .....	54	53	54	55	55	55	55	55
Anthropology (cultural & social) .....	128	130	132	135	135	138	135	135
Economics (except agricultural) .....	202	202	205	204	198	198	196	197
Geography .....	99	99	100	101	99	100	101	101
History and philosophy of science .....	19	20	21	21	23	23	23	24
Linguistics .....	70	69	69	70	72	71	70	71
Political science .....	317	322	328	334	335	337	338	341
Sociology .....	177	178	179	180	177	174	174	175
Sociology/anthropology .....	28	25	26	25	25	25	24	24
Social sciences, n.e.c. .....	172	175	189	196	205	204	206	214
Engineering, total .....	1,322	1,344	1,380	1,406	1,420	1,440	1,462	1,481
Aerospace engineering .....	48	50	52	53	52	54	54	56
Agricultural engineering .....	41	40	38	38	38	38	38	39
Biomedical engineering .....	56	56	57	59	61	64	72	77
Chemical engineering .....	141	141	142	142	144	144	144	147
Civil engineering .....	203	205	215	221	230	234	237	244
Electrical engineering .....	217	219	226	231	235	238	241	241
Engineering science .....	37	39	41	39	36	36	38	40
Industrial eng./manufacturing eng. ....	139	148	157	160	163	164	164	161
Mechanical engineering .....	185	185	187	189	189	189	190	190
Metallurgical/materials eng. ....	101	101	104	106	107	112	113	111
Mining engineering .....	28	30	29	26	24	24	24	24
Nuclear engineering .....	25	25	26	26	24	23	24	24
Petroleum engineering .....	20	20	20	21	20	18	17	16
Engineering, n.e.c. ....	81	85	86	95	97	102	106	111

See explanatory information, if any, and SOURCE at end of table.

**Technical Table 2. Number of science, engineering, and health departments  
in doctorate-granting institutions, by detailed field: 1992-1999**

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Field	1992	1993	1994	1995	1996	1997	1998	1999
Total, health fields .....	2,641	2,736	2,806	2,861	2,881	2,837	2,853	2,893
Medical fields, total .....	1,963	2,030	2,082	2,120	2,121	2,062	2,061	2,079
Anesthesiology .....	86	86	88	88	90	89	89	87
Cardiology .....	68	69	70	71	71	71	71	72
Oncology/cancer research .....	45	48	50	55	57	61	62	70
Endocrinology .....	73	72	74	74	74	71	71	72
Gastroenterology .....	66	68	71	71	71	68	68	68
Hematology .....	69	71	73	73	72	71	69	72
Neurology .....	137	145	153	154	151	154	156	163
Obstetrics and gynecology .....	95	96	96	96	95	90	91	91
Ophthalmology .....	80	81	81	81	79	79	79	78
Otorhinolaryngology .....	70	71	72	72	72	68	64	64
Pediatrics .....	109	111	115	116	118	111	112	110
Preventive medicine/community health .....	174	178	182	186	187	186	193	196
Psychiatry .....	101	103	107	107	104	101	100	99
Pulmonary disease .....	64	67	68	69	68	66	67	66
Radiology .....	135	137	139	141	138	134	129	131
Surgery .....	238	246	251	257	259	245	244	246
Clinical medicine, n.e.c. .....	353	381	392	409	415	397	396	394
Other health fields, total .....	678	706	724	741	760	775	792	814
Dental sciences .....	82	86	83	82	81	76	73	74
Nursing .....	135	139	143	149	147	152	156	157
Pharmaceutical sciences .....	86	88	89	90	93	91	92	91
Speech pathology/audiology .....	132	135	137	138	139	141	142	144
Veterinary sciences .....	42	44	45	46	46	47	48	51
Health related, n.e.c. .....	201	214	227	236	254	268	281	297

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 3. Number of science, engineering, and health departments  
in master's-granting institutions, by detailed field: 1992-1999**

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Field	1992	1993	1994	1995	1996	1997	1998	1999
Total, all surveyed fields .....	1,353	1,396	1,449	1,475	1,474	1,513	1,531	1,568
Total, science and engineering fields .....	1,184	1,220	1,262	1,274	1,261	1,288	1,298	1,315
Sciences, total .....	1,024	1,057	1,093	1,102	1,096	1,115	1,123	1,135
Physical sciences, total .....	112	116	117	114	110	114	113	111
Astronomy .....	0	0	0	0	0	0	0	0
Chemistry .....	74	74	74	70	68	69	68	68
Physics .....	29	31	31	31	30	31	31	30
Physical sciences, n.e.c. .....	9	11	12	13	12	14	14	13
Earth, atmos., & ocean sci., total .....	52	51	53	59	59	62	63	63
Atmospheric sciences .....	1	1	1	2	2	2	2	1
Geosciences .....	28	27	28	29	29	30	30	31
Oceanography .....	6	6	6	6	5	6	6	7
Earth, atmos., & ocean sci., n.e.c. .....	17	17	18	22	23	24	25	24
Mathematical sciences, total .....	97	102	103	103	102	105	104	104
Mathematics & applied mathematics .....	93	96	97	97	100	99	99	99
Statistics .....	4	6	6	6	5	5	5	5
Computer sciences .....	74	80	83	84	85	84	85	90
Agricultural sciences .....	27	27	33	34	32	31	32	32
Biological sciences, total .....	169	167	166	170	168	170	170	173
Anatomy .....	0	0	0	0	0	0	0	0
Biochemistry .....	2	3	4	4	4	4	4	3
Biology .....	132	128	126	126	127	127	127	128
Biometry/epidemiology .....	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0
Botany .....	3	2	2	2	2	2	2	2
Cell biology .....	0	1	1	2	1	3	3	3
Ecology .....	3	3	3	3	2	4	4	4
Entomology/parasitology .....	0	0	0	0	0	0	0	0
Genetics .....	1	1	1	1	1	1	1	2
Microbio., immunology, & virology .....	2	2	2	2	2	3	2	2
Nutrition .....	10	11	12	14	14	12	13	13
Pathology .....	2	2	2	2	2	1	1	1
Pharmacology .....	1	1	0	0	0	0	1	1
Physiology .....	0	0	0	0	0	0	0	2
Zoology .....	3	2	2	2	2	2	2	2
Biosciences, n.e.c. .....	10	11	11	12	11	11	10	10
Psychology, total .....	214	225	233	230	232	240	239	246
Psychology, general .....	84	87	87	86	87	88	88	88
Clinical psychology .....	29	30	34	34	34	36	36	38
Psychology, n.e.c. .....	101	108	112	110	111	116	115	120
Social sciences, total .....	279	289	305	308	308	309	317	316
Agricultural economics .....	2	3	3	3	3	3	3	3
Anthropology (cultural & social) .....	11	11	11	11	11	12	12	13
Economics (except agricultural) .....	32	33	33	34	35	35	36	35
Geography .....	23	23	23	23	23	23	23	24
History and philosophy of science .....	0	0	0	0	0	0	2	2
Linguistics .....	7	7	7	7	7	7	7	7
Political science .....	99	100	107	109	109	107	107	109
Sociology .....	43	43	44	45	43	45	46	46
Sociology/anthropology .....	2	2	2	2	2	2	1	1
Social sciences, n.e.c. .....	60	67	75	74	75	75	80	76
Engineering, total .....	160	163	169	172	165	173	175	180
Aerospace engineering .....	2	2	4	4	3	3	3	3
Agricultural engineering .....	0	0	0	0	0	0	0	0
Biomedical engineering .....	3	4	4	4	3	4	4	4
Chemical engineering .....	6	6	6	7	7	7	7	6
Civil engineering .....	26	27	29	32	32	32	31	30
Electrical engineering .....	39	39	39	41	41	43	43	46
Engineering science .....	2	2	2	2	2	2	2	2
Industrial eng./manufacturing eng. ....	27	27	27	29	27	26	29	30
Mechanical engineering .....	21	22	22	23	21	22	23	24
Metallurgical/materials eng. ....	6	6	6	5	4	5	4	5
Mining engineering .....	4	4	4	2	2	2	2	2
Nuclear engineering .....	0	0	0	0	0	0	0	0
Petroleum engineering .....	1	1	1	1	1	1	1	1
Engineering, n.e.c. ....	23	23	25	22	22	26	26	27

See explanatory information, if any, and SOURCE at end of table.

**Technical Table 3. Number of science, engineering, and health departments  
in master's-granting institutions, by detailed field: 1992-1999**

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Field	1992	1993	1994	1995	1996	1997	1998	1999
Total, health fields .....	169	176	187	201	213	225	233	253
Medical fields, total .....	10	12	15	16	14	15	17	19
Anesthesiology .....	2	3	3	3	2	3	3	3
Cardiology .....	0	0	0	0	0	0	0	0
Oncology/cancer research .....	0	0	0	0	0	0	0	0
Endocrinology .....	0	0	0	0	0	0	0	0
Gastroenterology .....	0	0	0	0	0	0	0	0
Hematology .....	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0
Obstetrics and gynecology .....	0	0	0	0	0	0	0	0
Ophthalmology .....	0	0	0	0	0	0	0	0
Otorhinolaryngology .....	0	0	0	0	0	0	0	0
Pediatrics .....	0	0	0	0	0	0	0	0
Preventive medicine/community health .....	5	6	7	7	7	7	8	9
Psychiatry .....	1	1	2	2	1	1	1	1
Pulmonary disease .....	0	0	0	0	0	0	0	0
Radiology .....	0	0	0	1	1	1	1	1
Surgery .....	0	0	0	0	0	0	0	0
Clinical medicine, n.e.c. ....	2	2	3	3	3	3	4	5
Other health fields, total .....	159	164	172	185	199	210	216	234
Dental sciences .....	0	0	0	0	0	0	0	0
Nursing .....	49	52	55	64	67	71	72	81
Pharmaceutical sciences .....	2	2	1	1	1	1	2	2
Speech pathology/audiology .....	55	54	55	57	61	63	65	67
Veterinary sciences .....	1	1	1	1	1	1	1	1
Health related, n.e.c. ....	52	55	60	62	69	74	76	83

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 4. Original departmental response rates: 1975-1999**

Year	Total	Complete response	Percent	Partial response	Percent	Non-response	Percent
1975 .....	9,162	8,998	98.2	N/A	N/A	N/A	N/A
1976 .....	9,275	9,148	98.6	N/A	N/A	N/A	N/A
1977 .....	9,513	9,432	99.1	N/A	N/A	N/A	N/A
1978 <sup>1</sup> .....	8,242	8,077	98.0	N/A	N/A	N/A	N/A
1979 .....	9,796	9,446	96.4	N/A	N/A	N/A	N/A
1980 .....	9,930	9,593	96.6	N/A	N/A	N/A	N/A
1981 .....	9,917	8,594	86.7	613	6.2	710	7.2
1982 .....	9,776	8,104	82.9	744	7.6	928	9.5
1983 .....	9,663	8,070	83.5	816	8.4	777	8.0
1984 <sup>2</sup> .....	8,748	7,490	85.6	643	7.4	615	7.0
1985 <sup>2</sup> .....	9,025	7,818	86.6	672	7.4	535	5.9
1986 <sup>2</sup> .....	9,097	7,817	85.9	779	8.6	501	5.5
1987 <sup>2</sup> .....	9,254	8,030	86.8	715	7.7	509	5.5
1988 .....	10,295	8,812	85.6	970	9.4	513	5.0
1989 .....	10,318	8,908	86.3	891	8.6	519	5.0
1990 .....	10,483	8,884	84.7	1,053	10.0	546	5.2
1991 .....	10,705	9,052	84.6	1,186	11.1	467	4.4
1992 .....	10,936	9,066	82.9	1,538	14.1	332	3.0
1993 .....	11,146	9,156	82.1	1,555	14.0	435	3.9
1994 .....	11,411	8,863	77.7	2,109	18.5	439	3.8
1995 .....	11,598	9,514	82.0	1,730	14.9	354	3.1
1996 .....	11,592	9,851	85.0	1,522	13.1	219	1.9
1997 .....	11,597	9,720	83.8	1,665	14.4	212	1.8
1998 .....	11,718	9,822	83.8	1,706	14.6	190	1.6
1999 .....	11,833	9,396	79.4	2,289	19.3	148	1.3

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> Master's-granting institutions were surveyed on a sample basis from 1984 through 1987.

**NOTE:** Departments providing partial responses are included in the complete response column prior to 1981 and reported separately beginning in 1981.

**KEY:** N/A = Not applicable

**SOURCE:** National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 5. Imputation for nonresponse in doctorate-granting institutions,  
by field and enrollment status: 1997-1999**

Area of science and engineering	Number of graduate departments		Graduate enrollment								
			Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full-time	Part-time	Postdoctorates	Full-time	Part-time	Postdoctorates	Full-time	Part-time	Postdoctorates
Fall 1999											
Total, all areas .....	10,265	126	309,466	123,191	40,244	4,392	3,034	540	1.4	2.5	1.3
Engineering .....	1,481	16	66,083	29,404	3,156	668	633	39	1.0	2.2	1.2
Physical sciences .....	581	8	26,159	3,328	6,043	328	41	42	1.3	1.2	.7
Earth, atmospheric, & ocean sciences .....	360	3	10,057	2,754	919	47	1	6	.5	.0	.7
Mathematical sciences .....	393	6	11,175	3,126	348	110	42	0	1.0	1.3	.0
Computer sciences .....	307	6	20,186	15,207	326	219	177	0	1.1	1.2	.0
Agricultural sciences .....	327	4	8,668	2,482	708	178	77	8	2.1	3.1	1.1
Biological sciences .....	1,996	14	45,442	7,894	15,910	523	178	217	1.2	2.3	1.4
Psychology .....	590	13	28,615	10,713	703	626	425	10	2.2	4.0	1.4
Social sciences .....	1,337	23	49,482	23,628	451	660	742	5	1.3	3.1	1.1
Health fields .....	2,893	33	43,599	24,655	11,680	1,033	718	213	2.4	2.9	1.8
Fall 1998											
Total, all areas .....	10,155	167	303,095	123,434	39,421	4,628	2,688	758	1.5	2.2	1.9
Engineering .....	1,462	9	63,627	30,252	2,822	443	334	21	.7	1.1	.7
Physical sciences .....	581	6	25,909	3,471	5,884	114	8	9	.4	.2	.2
Earth, atmospheric, & ocean sciences .....	361	6	9,992	2,929	893	135	30	44	1.4	1.0	4.9
Mathematical sciences .....	393	5	11,129	3,417	274	268	75	4	2.4	2.2	1.5
Computer sciences .....	299	7	18,070	14,141	365	307	93	8	1.7	.7	2.2
Agricultural sciences .....	333	4	8,529	2,492	656	88	22	7	1.0	.9	1.1
Biological sciences .....	1,977	27	45,296	7,770	15,511	991	83	175	2.2	1.1	1.1
Psychology .....	574	15	28,898	11,104	606	785	310	8	2.7	2.8	1.3
Social sciences .....	1,322	19	50,027	22,780	388	584	687	0	1.2	3.0	.0
Health fields .....	2,853	69	41,618	25,078	12,022	913	1,046	482	2.2	4.2	4.0
Fall 1997											
Total, all areas .....	10,077	177	304,029	125,130	38,105	4,626	3,204	757	1.5	2.6	2.0
Engineering .....	1,440	21	64,075	31,036	2,947	606	899	20	.9	2.9	.7
Physical sciences .....	577	7	26,319	3,440	5,856	152	70	8	.6	2.0	.1
Earth, atmospheric, & ocean sciences .....	352	7	9,987	3,165	934	193	21	30	1.9	.7	3.2
Mathematical sciences .....	396	7	11,591	3,384	302	144	50	2	1.2	1.5	.7
Computer sciences .....	292	5	16,761	13,976	316	301	387	0	1.8	2.8	.0
Agricultural sciences .....	328	1	8,677	2,401	692	30	1	5	.3	.0	.7
Biological sciences .....	1,959	26	45,232	7,945	14,932	646	108	199	1.4	1.4	1.3
Psychology .....	571	20	29,356	11,070	567	784	556	1	2.7	5.0	.2
Social sciences .....	1,325	33	51,792	22,981	362	892	403	3	1.7	1.8	.8
Health fields .....	2,837	50	40,239	25,732	11,197	878	709	489	2.2	2.8	4.4

**SOURCE:** National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 6. Imputation for nonresponse in master's-granting institutions,  
by field and enrollment status: 1997-1999**

Area of science and engineering	Number of graduate departments		Graduate enrollment								
			Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full-time	Part-time	Postdoctorates	Full-time	Part-time	Postdoctorates	Full-time	Part-time	Postdoctorates
Fall 1999											
Total, all areas .....	1,568	22	24,939	35,829	102	537	694	0	2.2	1.9	0.0
Engineering .....	180	0	1,749	4,232	7	0	0	0	.0	.0	.0
Physical sciences .....	111	2	481	721	64	1	2	0	.2	.3	.0
Earth, atmospheric, & ocean sciences .....	63	0	435	836	2	0	0	0	.0	.0	.0
Mathematical sciences .....	104	1	617	1,336	0	5	7	0	.8	.5	.0
Computer sciences .....	90	0	2,522	4,645	4	0	0	0	.0	.0	.0
Agricultural sciences .....	32	0	542	344	9	0	0	0	.0	.0	.0
Biological sciences .....	173	3	1,826	2,158	6	65	33	0	3.6	1.5	.0
Psychology .....	246	7	6,100	6,446	6	272	265	0	4.5	4.1	.0
Social sciences .....	316	4	3,776	8,139	0	25	275	0	.7	3.4	.0
Health fields .....	253	5	6,891	6,972	4	169	112	0	2.5	1.6	.0
Fall 1998											
Total, all areas .....	1,531	20	24,352	34,843	118	424	549	28	1.7	1.6	23.7
Engineering .....	175	0	1,704	4,386	6	0	0	0	.0	.0	.0
Physical sciences .....	113	2	481	710	80	15	21	28	3.1	3.0	35.0
Earth, atmospheric, & ocean sciences .....	63	1	453	885	4	3	8	0	.7	.9	.0
Mathematical sciences .....	104	1	622	1,320	0	1	0	0	.2	.0	.0
Computer sciences .....	85	1	1,902	3,914	3	8	6	0	.4	.2	.0
Agricultural sciences .....	32	0	486	370	10	0	0	0	.0	.0	.0
Biological sciences .....	170	0	1,809	2,249	6	0	0	0	.0	.0	.0
Psychology .....	239	6	6,250	6,305	6	282	321	0	4.5	5.1	.0
Social sciences .....	317	8	3,795	7,429	1	102	147	0	2.7	2.0	.0
Health fields .....	233	1	6,850	7,275	2	13	46	0	.2	.6	.0
Fall 1997											
Total, all areas .....	1,513	32	23,281	34,839	111	1,063	659	0	4.6	1.9	0.0
Engineering .....	173	5	1,501	4,458	4	81	95	0	5.4	2.1	.0
Physical sciences .....	114	0	546	773	71	0	0	0	.0	.0	.0
Earth, atmospheric, & ocean sciences .....	62	2	540	873	4	18	6	0	3.3	.7	.0
Mathematical sciences .....	105	0	553	1,201	2	0	0	0	.0	.0	.0
Computer sciences .....	84	4	1,574	3,680	2	159	128	0	10.1	3.5	.0
Agricultural sciences .....	31	0	456	359	9	0	0	0	.0	.0	.0
Biological sciences .....	170	0	1,779	2,184	8	0	0	0	.0	.0	.0
Psychology .....	240	7	6,195	6,505	7	569	249	0	9.2	3.8	.0
Social sciences .....	309	12	3,743	7,548	0	218	174	0	5.8	2.3	.0
Health fields .....	225	2	6,394	7,258	4	18	7	0	.3	.1	.0

**SOURCE:** National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 7. Imputation rates for all departments  
at all graduate institutions: fall 1999**

[ Number of imputed departments = 2,280 ]

Item 5 Enrollment status, mechanism of support, and gender of S&E graduate students	Students receiving financial assistance										Self support (includ. loans & family sources)	Total for all sources (sum of columns A - K)		
	Federal sources (excluding loans)						Non-Federal sources							
	DoD	HHS		NSF	Dept. of Agr.	NASA	Other Federal sources	Inst. support	Foreign sources	Other U.S. sources				
		(B)	(C)							(K)	(L)			
(A)				(D)	(E)	(F)	(G)	(H)	(I)	(J)				
Full-time graduate S&E students:														
Graduate fellowships .....	16.5	16.4	32.6	10.6	3.4	9.6	8.1	15.6	13.3	19.5	N/A	15.0		
Graduate traineeships .....	26.3	10.4	20.5	16.8	20.0	0.0	12.7	9.7	15.6	21.3	N/A	12.9		
Graduate research assistants .....	17.7	11.2	6.7	15.6	13.2	14.4	14.2	13.5	5.6	14.8	N/A	13.2		
Graduate teaching assistants .....	N/A	18.1	14.9	26.0	28.3	0.0	17.5	15.9	N/A	22.4	N/A	15.0		
Other types of support .....	71.7	18.9	16.7	14.6	12.1	2.6	13.4	18.5	14.3	22.2	24.2	23.3		
Full-time total .....	29.4	11.7	17.9	14.8	13.0	13.2	13.3	15.3	12.6	17.3	24.2	1.5		
Full-time women .....	23.2	11.9	20.8	12.7	13.6	12.0	13.9	17.0	11.2	17.9	26.9	4.8		

Items 6 and 7 Race/ethnicity of part-time and full-time graduate S&E students, by sex	U.S. citizens and permanent residents							Foreign	Total (sum of columns A - H)
	Black non- Hispanic	American Indian/ Alaskan	Asian/ Pacific Islander	Hispanic	White non- Hispanic	Other	Unknown		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)		
Part-time, total .....	7.5	5.5	5.6	9.7	10.3	60.0	6.7	8.8	2.5
Men enrolled part-time .....	7.2	5.2	5.4	8.5	10.2	68.2	6.1	8.3	5.7
Women enrolled part-time .....	7.7	5.8	5.9	10.8	10.4	51.6	7.3	9.8	6.4
Full-time, total .....	7.0	4.6	7.7	10.2	7.8	44.2	4.5	6.0	1.5
Men enrolled full-time .....	8.6	5.7	5.8	13.1	9.2	40.7	6.1	7.0	4.4
Women enrolled full-time .....	7.5	6.5	9.9	10.8	9.5	47.0	7.8	7.5	4.8
Full-time first-time total .....	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.3
Full-time first-time women .....	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.5

Item 8 S&E postdoctorates and nonfaculty research staff with doctorates	Postdoctorates						Other non- faculty research staff with doctor- ates					
	Source of support			Non- Federal	Total for all sources (A - D)	Foreign postdoc- torates						
	Federal											
	Fellow- ships	Trainee- ships	Research grants									
(A)	(B)	(C)	(D)	(E)	(F)	(G)						
Total .....	17.4	8.8	8.5	10.2	2.0	4.7	4.4					
Women .....	16.7	8.5	8.5	10.0	4.8	3.8	4.3					
With MD, DDS or DVM degrees .....	33.7	8.9	8.1	10.0	5.4	4.7	4.1					

**KEY:** N/A = not applicable

**SOURCE:** National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 8. Comparison of graduate enrollment data as originally published and as modified through the fall 1999 graduate student survey cycle: 1975-1999**

Page 1 of 2

Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
Total graduate enrollment in surveyed fields									
1975 <sup>1</sup> .....	336,843	328,550	-2.5	290,662	296,384	2.0	46,181	32,166	-30.3
1976 .....	345,979	333,755	-3.5	297,280	300,794	1.2	48,699	32,961	-32.3
1977 .....	362,978	345,416	-4.8	306,710	309,338	.9	56,268	36,078	-35.9
1978 <sup>2</sup> .....	N/A	339,912	N/A	311,982	302,370	-3.1	N/A	37,542	N/A
1979 .....	375,267	357,609	-4.7	321,770	318,683	-1.0	53,497	38,926	-27.2
1980 .....	383,210	367,111	-4.2	333,658	328,330	-1.6	49,552	38,781	-21.7
1981 .....	392,034	375,158	-4.3	340,203	334,983	-1.5	51,831	40,175	-22.5
1982 .....	399,682	382,334	-4.3	347,414	341,216	-1.8	52,268	41,118	-21.3
1983 .....	413,564	390,474	-5.6	358,276	348,167	-2.8	55,288	42,307	-23.5
1984 <sup>3</sup> .....	415,064	394,670	-4.9	363,470	349,519	-3.8	51,594	45,151	-12.5
1985 <sup>3</sup> .....	434,836	404,021	-7.1	371,052	358,773	-3.3	63,784	45,248	-29.1
1986 <sup>3</sup> .....	446,102	415,520	-6.9	384,203	369,370	-3.9	61,899	46,150	-25.4
1987 <sup>3</sup> .....	449,585	421,497	-6.2	388,681	375,011	-3.5	60,904	46,486	-23.7
1988 .....	445,595	424,592	-4.7	391,683	381,769	-2.5	53,912	42,823	-20.6
1989 .....	440,983	434,552	-1.5	385,025	389,322	1.1	55,958	45,230	-19.2
1990 .....	458,943	452,171	-1.5	398,405	403,335	1.2	60,538	48,836	-19.3
1991 .....	475,691	471,284	-.9	411,296	418,833	1.8	64,395	52,451	-18.5
1992 .....	495,397	493,624	-.4	427,792	438,109	2.4	67,605	55,515	-17.9
1993 .....	506,678	504,409	-.4	440,875	446,383	1.2	65,803	58,026	-11.8
1994 .....	506,626	504,516	-.4	441,480	447,058	1.3	65,146	57,458	-11.8
1995 .....	501,510	499,750	-.4	436,328	441,360	1.2	65,182	58,390	-10.4
1996 .....	494,526	494,195	-.1	430,631	435,959	1.2	63,895	58,236	-8.9
1997 .....	487,104	487,279	.0	424,650	429,159	1.1	62,454	58,120	-6.9
1998 .....	485,754	485,724	.0	422,834	426,529	.9	62,920	59,195	-5.9
1999 .....	493,425	N/A	N/A	432,657	N/A	N/A	60,768	N/A	N/A
Full-time									
1975 <sup>1</sup> .....	228,316	219,687	-3.8	210,641	207,930	-1.3	17,675	11,757	-33.5
1976 .....	233,748	223,446	-4.4	215,355	211,767	-1.7	18,393	11,679	-36.5
1977 .....	238,202	226,776	-4.8	218,226	214,199	-1.8	19,976	12,577	-37.0
1978 <sup>2</sup> .....	N/A	223,030	N/A	217,588	209,946	-3.5	N/A	13,084	N/A
1979 .....	243,331	231,790	-4.7	224,057	218,215	-2.6	19,274	13,575	-29.6
1980 .....	249,111	238,448	-4.3	230,601	224,393	-2.7	18,510	14,055	-24.1
1981 .....	253,428	242,076	-4.5	234,529	228,198	-2.7	18,899	13,878	-26.6
1982 .....	255,959	244,796	-4.4	237,676	231,193	-2.7	18,283	13,603	-25.6
1983 .....	263,800	252,055	-4.5	243,646	237,166	-2.7	20,154	14,889	-26.1
1984 <sup>3</sup> .....	264,146	253,922	-3.9	246,848	237,844	-3.6	17,298	16,078	-7.1
1985 <sup>3</sup> .....	269,319	257,287	-4.5	249,666	241,421	-3.3	19,653	15,866	-19.3
1986 <sup>3</sup> .....	279,235	266,168	-4.7	259,980	250,041	-3.8	19,255	16,127	-16.2
1987 <sup>3</sup> .....	285,200	271,056	-5.0	264,862	254,671	-3.8	20,338	16,385	-19.4
1988 .....	288,619	275,185	-4.7	268,385	260,490	-2.9	20,234	14,695	-27.4
1989 .....	286,619	282,711	-1.4	267,554	267,672	.0	19,065	15,039	-21.1
1990 .....	295,836	292,823	-1.0	275,262	276,472	.4	20,574	16,351	-20.5
1991 .....	308,669	307,055	-.5	286,756	289,084	.8	21,913	17,971	-18.0
1992 .....	323,399	322,609	-.2	299,753	303,305	1.2	23,646	19,304	-18.4
1993 .....	330,249	329,701	-.2	307,181	309,429	.7	23,068	20,272	-12.1
1994 .....	331,969	332,149	.1	307,964	311,064	1.0	24,005	21,085	-12.2
1995 .....	330,235	329,356	-.3	305,652	307,446	.6	24,583	21,910	-10.9
1996 .....	328,368	328,628	.1	303,586	306,225	.9	24,782	22,403	-9.6
1997 .....	326,842	327,310	.1	301,573	304,029	.8	25,269	23,281	-7.9
1998 .....	327,609	327,447	.0	301,544	303,095	.5	26,065	24,352	-6.6
1999 .....	334,405	N/A	N/A	309,466	N/A	N/A	24,939	N/A	N/A

See explanatory information, if any, and SOURCE at end of table.

**Technical Table 8. Comparison of graduate enrollment data as originally published and as modified through the fall 1999 graduate student survey cycle: 1975-1999**

Page 2 of 2

Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
Part-time									
1975 <sup>1</sup> .....	108,527	108,863	0.3	80,021	88,454	10.5	28,506	20,409	-28.4
1976 .....	112,231	110,309	-1.7	81,925	89,027	8.7	30,306	21,282	-29.8
1977 .....	124,776	118,640	-4.9	88,484	95,139	7.5	36,292	23,501	-35.2
1978 <sup>2</sup> .....	N/A	116,882	N/A	94,394	92,424	-2.1	N/A	24,458	N/A
1979 .....	131,936	125,819	-4.6	97,713	100,468	2.8	34,223	25,351	-25.9
1980 .....	134,099	128,663	-4.1	103,057	103,937	.9	31,042	24,726	-20.3
1981 .....	138,606	133,082	-4.0	105,674	106,785	1.1	32,932	26,297	-20.1
1982 .....	143,723	137,538	-4.3	109,738	110,023	.3	33,985	27,515	-19.0
1983 .....	149,764	138,419	-7.6	114,630	111,001	-3.2	35,134	27,418	-22.0
1984 <sup>3</sup> .....	150,918	140,748	-6.7	116,622	111,675	-4.2	34,296	29,073	-15.2
1985 <sup>3</sup> .....	165,517	146,734	-11.3	121,386	117,352	-3.3	44,131	29,382	-33.4
1986 <sup>3</sup> .....	166,867	149,352	-10.5	124,223	119,329	-3.9	42,644	30,023	-29.6
1987 <sup>3</sup> .....	164,385	150,441	-8.5	123,819	120,340	-2.8	40,566	30,101	-25.8
1988 .....	156,976	149,407	-4.8	123,298	121,279	-1.6	33,678	28,128	-16.5
1989 .....	154,364	151,841	-1.6	117,471	121,650	3.6	36,893	30,191	-18.2
1990 .....	163,107	159,348	-2.3	123,143	126,863	3.0	39,964	32,485	-18.7
1991 .....	167,022	164,229	-1.7	124,540	129,749	4.2	42,482	34,480	-18.8
1992 .....	171,998	171,015	-.6	128,039	134,804	5.3	43,959	36,211	-17.6
1993 .....	176,429	174,708	-1.0	133,694	136,954	2.4	42,735	37,754	-11.7
1994 .....	174,657	172,367	-1.3	133,516	135,994	1.9	41,141	36,373	-11.6
1995 .....	171,275	170,394	-.5	130,676	133,914	2.5	40,599	36,480	-10.1
1996 .....	166,158	165,567	-.4	127,045	129,734	2.1	39,113	35,833	-8.4
1997 .....	160,262	159,969	-.2	123,077	125,130	1.7	37,185	34,839	-6.3
1998 .....	158,145	158,277	.1	121,290	123,434	1.8	36,855	34,843	-5.5
1999 .....	159,020	N/A	N/A	123,191	N/A	N/A	35,829	N/A	N/A

<sup>1</sup> The 1976 survey also collected 1975 data from master's-granting institutions.

<sup>2</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>3</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**NOTE:** The percent change column is presented as a measure of retroactive changes in survey definitions. Three survey changes in the late 1980s and early 1990s had a retroactive effect on figures reported for earlier years. First, degree-granting status (doctorate or master's) used to be determined by an institution's status each year. Beginning in 1992, degree-granting status was determined by the status reported in the latest survey year. This change shifted numerous institutions (and students) from master's-granting to doctorate-granting categories for years before 1992. Second, in 1988 guidelines to determine S&E departments were tightened. This change meant retroactively dropping departments in fields like educational psychology, social work, and cultural studies from the survey population. Third, improved estimates were generated for years in which enrollments at master's-granting institutions were sampled (1984-1987).

**KEY:** N/A = Not applicable

**SOURCE:** National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering